

Message Text

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ORIGIN PM-04

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C O N F I D E N T I A L STATE 079528

E.O. 11652:ADS-DECLASSIFY UPON COMPLETION OF NEGOTIATIONS

TAGS: MARR, NZ

SUBJECT: REQUEST FOR FOREIGN OPERATING RIGHTS IN SUPPORT
OF PROJECT 2301

1. REQUEST EMBASSY SEEK APPROVAL OF THE GOVERNMENT OF NEW
ZEALAND FOR THE OPERATIONS DETAILED AS FOLLOWS.

2. USAF PROPOSES TO DISPATCH A TEAM OF SCIENTISTS FROM THE
UNIVERSITY OF MARYLAND TO CHRISTCHURCH TO CONDUCT FUNDAMEN-
TAL RESEARCH IN THE EFFECT OF GRAVITY ON TIME RATES AS
MEASURED BY A CESIUM TIME STANDARD. THE PURPOSE OF THE
RESEARC; IS TO INCREASE BASIC KNOWLEDGE OF THE THEORY OF
GENERAL RELATIVITY. INFORMATION GAINED FROM THIS PROJECT
CA; BE USED TO MORE ACCURATELY POSITION FUTURE GEOSTATIONARY
SATELLITES.

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3. THE RESEARCH WOULD BE CONDUCTED ABOARD A MODIFIED
LOCKHEED C-141, SN 61-2779, OWNED BY THE US GOVERNMENT AND
OPERATED BY THE 4950TH TEST WING, USAF, WRIGHT-PATTERSON
AFB, OHIO. THE CREW WOULD CONSIST OF SIX OFFICERS, TEN
ENLISTED PERSONNEL AND SIX DOD SPONSORED CIVILIAN SCIENTISTS.
ON BOARD THE AIRCRAFT WOULD BE ONE ATOMIC CLOCK ENSEMBLE,

WHILE ANOTHER CLOCK ENSEMBLE REMAINS IN PLACE AT THE UNIVERSITY OF MARYLAND, USA. BY COMPARING THE RECORDED TIME

SAMPLES FROM EACH OF THE CLOCKS, THE SCIENTIFIC TEAM HOPES TO DETERMINE IF THE TRANSPORTED CLOCK HAS SUBSTANTIALLY DEVIATED IN ACCURACY DUE TO THE VARIABLES THAT ACT UPON IT, I.E., ACCELERATION, GRAVITY. VARYING LATITUDES, MOVEMENT EAST TO WEST VERSUS WEST TO EAST. THE CLOCK ENSEMBLE, CONSISTING OF SEVERAL ATOMIC CLOCKS EITHER CESIUM OR RUBIDIUM STANDARD, IS COUPLED TO A MINIATURE COMPUTER WITH SUPPORTING ELECTRICAL POWER. THE ENTIRE ASSEMBLY WHICH WEIGHS 3000 POUNDS (1360 KG), IS HOUSED ON A PALLET FIVE FEET LONG, FIVE FEET WIDE AND SEVEN FEET HIGH (1.5 X 1.5 X 2.1 METERS). THE ATOMIC CLOCK MEASURES THE INTERACTION OF THE NATURAL RESONANCE OF AN ATOM WHEN PLACED IN A SPECIFIC ELECTROMAGNETIC FIELD. THE RESULTANT RESONANCE PROVIDES A PRIME FREQUENCY STANDARD WHICH IS THEN USED TO SYNCHRONIZE THE CLOCKS. IT SHOULD BE EMPHASIZED THAT THE CLOCK DOES NOT CONTAIN NUCLEAR MATERIAL, AND THERE IS NO POSSIBILITY OF NUCLEAR EXPLOSION OR RADIOACTIVITY.

4. THE OPERATION WOULD CONSIST OF TWO DEPLOYMENTS OF THE C-141 AIRCRAFT AND CREW TO CHRISTCHURCH. ONE DEPLOYMENT WOULD ARRIVE 12 JUN 77 AND DEPART 16 JUN 77, AND THE OTHER WOULD ARRIVE 26 JUN 77 AND DEPART ON 30 JUN 77. DURING THE DEPLOYMENTS, THE AIRCRAFT WOULD REMAIN ON THE GROUND. SPECIFIC LOGISTIC REQUIREMENTS WOULD BE FORWARDED IN ACCORDANCE WITH THE USAF FOREIGN CLEARANCE GUIDE. CONFIDENTIAL

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5. DURING THIS MISSION, LOCAL SCIENTISTS AND OFFICIALS WOULD BE ENCOURAGED TO VISIT THE AIRCRAFT AND RECEIVE A BRIEFING BY THE PROJECT SCIENTISTS. ALL DATA OBTAINED FROM THE PROJECT IS UNCLASSIFIED AND WOULD BE RELEASED TO THE HOST GOVERNMENT, IF DESIRED. OF POTENTIAL BENEFIT TO ALL NATIONS, INCLUDING THE HOST WOULD BE THE FURTHERANCE OF SCIENTIFIC UNDERSTANDING OF THE THEORY OF GENERAL RELATIVITY AND PROVIDING AN ADVANCED BASIS FOR FUTURE THEORY ANALYSIS.

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Message Attributes

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